Strengthening the Transnational Regime Complex for Climate Change

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Abstract

The inadequacies of the inter-state institutions and negotiating processes central to international climate policy create a pressing need for innovative modes of governance. This paper proposes one promising and feasible approach: strengthening the existing *transnational* regime complex for climate change. Leading organizations could strengthen the regime complex by forging stronger links among institutions, increasing coordination and collaboration, supporting weaker institutions and encouraging the entry of new ones where governance gaps exist. An enhanced regime complex would have a multi-level structure, enabling transnational institutions to directly engage, address and support sub-state and societal actors at multiple levels of authority and scale. In this way the transnational regime complex would *bypass* recalcitrant national governments. It would also help *manage* recalcitrant states by focusing advocacy, creating demonstration effects and otherwise mobilizing pressure on governments. Regime entrepreneurs using the strategy of orchestration could deploy a range of incentives and other tools of influence to enroll, support and steer transnational organizations.

Introduction

The failure of the United States to exercise effective global leadership on climate change – the premise of this special issue – has created a pressing need for governance innovation. To be sure, the United States (US) has long been active on numerous environmental issues. On the complex global public good of climate change,[1] however, weak leadership by the most influential state[2] has almost certainly impeded international collective action.[3] Without that leadership, the multilateral negotiations central to global climate policy-making have produced manifestly inadequate results.

Most observers view the emissions reduction targets and nationally appropriate mitigation actions pledged under the 2009 Copenhagen Accord and formalized in the 2010 Cancun agreements as clearly insufficient to keep the increase in average global temperatures from breaching the current target of 2° C, much less the more ambitious targets states have agreed to consider.[4] Following Cancun, the US and other developed countries refused to consider any further climate agreements without a new negotiating process that encompassed developing country commitments. The 2011 Durban Platform is hopeful for adoption of an inclusive new "protocol, another legal instrument or an outcome with legal force," but its outcome remains legally and substantively uncertain.[5] The 2012 Doha Climate Gateway decisions and 2013 Bonn climate change conference laid the groundwork for negotiations under the Platform, but did little to advance its

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[1] Scott Barrett, *Why Cooperate? The Incentive to Supply Global Public Goods* (Oxford University Press 2007), at 84-102

[2] The US refused to ratify the Kyoto Protocol and will not participate in its second commitment period. It has likewise refused to ratify other significant environmental conventions. See Mary Jane Angelo, Rebecca M. Bratspies, David B. Hunter, John H. Knox, Noah Sachs & Sandra B. Zellmer, *Reclaiming Global Environmental Leadership: Why the United States Should Ratify Ten Pending Environmental Treaties* (2012), available at http://www.progressivereform.org/whitePapers.cfm

[3] Duncan Snidal, The Limits of Hegemonic Stability Theory, 39 *International Organization* 579-614 (1985); Oran R. Young, Political Leadership and Regime Formation: On the Development of Institutions in International Society, 45 *International Organization* 281-308 (1991)

[4] M.G.J. den Elzen, A.F. Hof, M.A. Mendoza Beltran, M. Roelfsema, B.J. van Ruijven, J. van Vliet, D.P. van Vuuren, N. Höhne, S. Moltmann, *Evaluation of the Copenhagen Accord: Chances and Risks for the 2°C Climate Goal* (2010), available at http://www.rivm.nl/bibliotheek/rapporten/500114018.pdf ; Vicki Duscha, Jakob Graichen, Sean Healy, Joachim Schleich, Katja Schumacher, *Post-2012 climate regime: How industrial and developing nations can help to reduce emissions – assessing emission trends, reduction potentials, incentive systems and negotiation options* (2010), available at http://www.umweltbundesamt.de/uba-info-medien-e/3954.html ; UNEP, *Bridging the Emissions Gap* (2011), available at http://www.unep.org/publications/contents/pub_details_search.asp?ID=6227

[5] Daniel Bodansky, *The Durban Platform: Issues and Options for a 2015 Agreement* (2012), available at http://www.c2es.org/publications?topic=2531

goals.[6] Significant steps have been taken on concrete issues such as financing (e.g., establishing the Green Climate Fund)[7] and technology development and transfer (e.g., establishing the Technology Mechanism),[8] but these too remain at early stages.

The US is far from the only barrier to global climate action, even if it is a potential hegemonic leader. China, India, Brazil and other major developing countries, among the largest and fastest-growing greenhouse gas emitters and with increasing political influence, have been unwilling to adopt any legally binding mitigation commitments, at least in the short term. Without these countries and the US, there is little chance of forming an effective minilateral "k-group" of major climate cooperators[9] as an alternative to a multilateral agreement. Again, the Durban Platform is hopeful, but at this point no more than that: although Durban calls for "the widest possible cooperation by all countries," even a legally binding instrument may include asymmetrical obligations, as Kyoto does, and any new instrument will not come into force until 2020. In the interim, although Doha extended the Kyoto Protocol for a second commitment period, Canada, Japan, New Zealand and Russia will not participate, leaving the Protocol applicable to only 15% of global emissions.[10]

The global policy processes on climate largely ignore these challenging collective action problems. They continue to center on multilateral, inter-state negotiations under the UN Framework Convention on Climate Change (UNFCCC), in which decisions must be taken by consensus; and they continue to pursue a comprehensive, legally-binding agreement. Under current political, economic and political economy conditions, such processes cannot produce effective and timely responses.

The inadequacies of inter-state governance extend beyond the climate regime. The 2012 United Nations Conference on Sustainable Development (Rio+20) addressed a broad range of sustainability issues, including climate change. While virtually all states approved the Rio+20 outcome document,[11] unlike Kyoto, on most major issues the document did little more than reiterate previous commitments (e.g., ¶¶ 190-92 on

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[6] Jessica Boyle, *A Mirage in the Deserts of Doha? Assessing the outcomes of COP 18*, (2012), available at http://www.iisd.org/publications/; Jennifer Morgan, *Reflections On Cop 18 In Doha: Negotiators Made Only Incremental Progress* (2012), available at http://insights.wri.org; UN Climate Change Secretariat, *June UN Climate Change Conference in Bonn Sees Concrete Progress Toward New Agreement and Speeding Up Climate Action* (14 June, 2013), available at http://unfccc.int/press/press_releases_advisories/items/7365.php

[7] UNFCCC, Decision 3/CP.17, *Launching the Green Climate Fund*, FCCC/CP/2011/9/Add.1 (2011)

[8] UNFCCC, Decision 1/CP.16, *The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Section IV.B (2010)

[9] Russell Hardin, *Collective Action* (Johns Hopkins Press 1982)

[10] Boyle, supra note ; Morgan, supra note

[11] United Nations Conference on Sustainable Development, *Outcome of the Conference: The Future We Want*, A/CONF.216/L.1, 19 (June 2012)

climate). In addition, Rio+20 had two specific themes. The first, the institutional framework for sustainable development, was addressed with moderate creativity and commitment. The UN has since approved some significant innovations, restructuring UNEP[12] and creating a new "universal intergovernmental high-level political forum" to replace the Commission on Sustainable Development.[13]

The second theme, the "green economy," in principle encompasses a thorough reworking of economic structures and practices, including de-carbonization. Here, however, progress was much more limited: the transformative idea of a green economy was reduced to a poorly defined toolbox of policy approaches that governments might voluntarily adopt in line with national priorities. One potentially significant step was the decision to develop global sustainable development goals, as part of a normative structure to replace the Millennium Development Goals after 2015. The UN has initiated an extensive goal development process.[14] Yet these will in the end be goals, not actions.

I do not mean to suggest that inter-state processes such as Copenhagen, Durban, Doha and Rio+20 be abandoned – they are essential to produce lasting global solutions to climate change and sustainable development. I do suggest, however, that serious efforts should be made to develop innovative, complementary approaches to help fill the governance gaps left by these processes. The more seriously one views the threat of climate change, the more dramatic and rapid such efforts should be.

This paper suggests one promising and feasible approach: strengthening the *transnational regime complex for climate change*. Even now, a significant number of transnational institutions address climate issues. They set standards for measuring and reporting carbon emissions and for carbon offsets, structure the voluntary carbon market, manage and finance renewable energy projects, disseminate information and play other important governance roles. These organizations are "transnational" in that they involve private actors and/or sub-national governments as well as, or rather than, states or inter-state organizations, and operate across borders. Together, they form a transnational "regime complex," a group of institutions that are loosely connected but still fragmented.[15] Many transnational institutions are weak, however, and linkages among

[12] Felix Dodds & Anita Nayar, Rio+20: A New Beginning, *UNEP Perspectives* #8 (2012); UNEP, United Nations Environment Programme Upgraded to Universal Membership Following Rio+20 Summit, Dec. 21, 2012, available at http://www.unep.org/newscentre/Default.aspx?DocumentID=2700&ArticleID=9363&l=en.

[13] *Format and Organizational Aspects of the High-Level Political Forum on Sustainable Development*, UNGA Res. A/67/L.72, 27 June 2013

[14] See UN Sustainable Development Knowledge Platform, *Post-2015 Process*, available at http://sustainabledevelopment.un.org/index.php?menu=1561

[15] Kenneth W. Abbott, The Transnational Regime Complex for Climate Change, 30 *Government and Policy: Environment and Planning C* 571-90 (2012); Haro van Asselt, Philipp Pattberg, Frank Biermann & Fariborz Zelli, The Fragmentation of Global Governance Architectures: A

them are limited. As presently constituted, then, the transnational regime complex for climate change (TRCCC) is not sufficiently ordered to take effective collective action.

Leading organizations could strengthen the TRCCC by increasing the level of coordination and collaboration among constituent institutions, while maintaining the benefits of polycentricity. Leading organizations could also support weaker institutions and encourage the entry of new ones where gaps in transnational governance exist. The TRCCC could be further enhanced through cooperation with other non-state institutions, especially relevant international organizations.

A strengthened TRCCC would contrast sharply with current international processes. It would not involve multilateral negotiations among states, and it would not seek to adopt comprehensive, binding rules for state conduct. Instead, it would have two principal goals, corresponding to the two major targets of its governance activities:[16]

- The first goal would be to "bypass" recalcitrant states, as well as states that lack the capabilities for successful climate interventions. By this I mean that the TRCCC would directly engage, address and support sub-state and societal actors, at multiple levels and scales within and across states, including through voluntary norms backed by economic and social incentives, rather than interacting with states as such.
- The second goal would be to "manage" recalcitrant states, at least to a modest degree. The TRCCC could not, of course, manage states in a hierarchical sense, exercising direction and control. It could, however, focus advocacy, create demonstration effects, promote norms and values, and otherwise mobilize coordinated political pressure on governments to take action on climate change. Because the TRCCC would have a multi-level structure, those pressures would flow from multiple sources and levels, within and without the state.

An enhanced TRCCC would make its greatest contribution as a complement to inter-state actions such as the Kyoto Protocol and any successor under Durban: each would enhance the other. The ideal would be an integrated system that brought together inter-state and transnational governance;[17] short of that, the TRCCC could independently provide complementary norms and services. Importantly, however, where international negotiations fail or produce insufficient results, the TRCCC could at least partially substitute for them: helping to fill governance gaps, influencing the behavior of

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Framework for Analysis, 9 *Global Environmental Politics* 14-40 (2009)

[16] I take the concepts of bypassing and managing from Kenneth W. Abbott, Philipp Genschel, Duncan Snidal & Bernhard Zangl, Orchestration: Global Governance through Intermediaries, unpublished manuscript, February 2013

[17] Kenneth W. Abbott, Engaging the Public and the Private in Global Sustainability Governance, *International Affairs* 88(3): 543-564 (2012)

governmental and societal actors, and generating governance innovations that stimulate and inform inter-state negotiations.

Section 1 of this article briefly summarizes the literature on transnational climate governance. Section 2 sets the stage for considering a strengthened TRCCC, defining key concepts and describing the transnational institutions currently in operation. Section 3 sketches the structure of a strengthened TRCCC. It considers the twin imperatives of ordering and polycentricity, inter-institutional linkages, the advantages of a multi-level structure, and the TRCCC's relationship to the inter-state climate regime. Section 4 critically assesses the potential of a strengthened TRCCC; it identifies barriers to transnational governance and inter-institutional cooperation, and considers how enhancing the TRCCC could help overcome them. Section 5 considers techniques for operationalizing the TRCCC; it calls for the emergence of "regime entrepreneurs," proposes the strategy of "orchestration," and suggests incentives and other tools of influence that regime entrepreneurs could deploy. The final section briefly concludes.

1. The transnational climate governance literature

An extensive literature in international relations, international law and policy documents the rise of non-state actors and transnational institutions: especially those that advocate policy[18] and make rules,[19] but also those that implement rules or provide operational services. This literature focuses on global governance generally[20] and climate governance specifically.[21]

Scholars have devoted particular attention to organizations formed by sub-state governments;[22] by private actors including business groups and NGOs;[23] and as public-

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[18] Margaret E. Keck & Kathryn Sikkink, *Activists Beyond Borders: Advocacy Networks in International Politics* (Cornell University Press 1998)

[19] Kenneth W. Abbott and Duncan Snidal, Strengthening International Regulation through Transnational New Governance: Overcoming the Orchestration Deficit, 42 *Vanderbilt Journal of Transnational L*aw 501-578 (2009)

[20] Robert Falkner, *Global Governance – The Rise of Non-State Actors* (2011), available at http://personal.lse.ac.uk/Falkner/_private/2011_EEAreport_GlobalGovernance.pdf

[21] Frank Biermann & Philipp Pattberg, Global Environmental Governance: Taking Stock, Moving Forward, 33 *Annual Rev. Environ. Resources* 277–94 (2008); Kal Raustiala and Natalie L. Bridgeman, Nonstate Actors in the Global Climate Regime (2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028603; Eric Dannenmaier, The Role of Non-state Actors in Climate Compliance, in Jutta Brunée, et al*.*, eds., *Climate Compliance* (Cambridge U. Press 2011)

[22] Michelle M. Betsill & Harriet Bulkeley, Cities and the Multilevel Governance of Global Climate Change, 12 *Global Governance* 141–159 (2006); Hari M. Osofsky, Multiscalar Governance and Climate Change: Reflections on the Role of States and Cities at Copenhagen, 25 *Maryland J. of International Law* 64 (2010)

[23] Abbott & Snidal, Strengthening International Regulation, supra note

private partnerships.[24] The literature proposes definitions and typologies of non-state actors and transnational governance modes, and assesses the governance potential of different types.[25] Green analyzes relationships among private climate standards organizations, and with public institutions, based on recognition of other standards.[26]

The most prominent theme of this literature is simply that non-state actors and institutions are here to stay: transnational governance must be taken seriously. On climate change, the literature bemoans the failures of inter-state processes, sometimes drawing favorable comparisons to more consensual, business-like transnational institutions.[27] Scholars have suggested alternative modes of inter-state action, but until recently have advanced few specific proposals for transnational governance.

The recent turn reflects growing interest in "polycentric" responses to climate change, which involve multiple sites of authority.[28] The Copenhagen conference was a major stimulant to this interest: its failure to reach a binding multilateral agreement was a prod to creative thinking, while its modest success in generating national pledges showed the possibilities of decentralized action. Advocates of polycentric responses argue that climate change, sustainable development and other global issues should be addressed through multiple, decentralized actions by formally independent actors and institutions operating at different levels and scales, rather than (only) through centralized, comprehensive rule-making.

Many proposals for polycentric action focus on "bottom-up" commitments by states, extending the Copenhagen model. Scholars have suggested varied mechanisms for commitments by individual states or small groups of states (e.g., a "carbon club"), with mechanisms to link commitments or ratchet them up over time.[29] Others highlight

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[24] Liliana B. Andonova, Public-Private Partnerships for the Earth: Politics and Patterns of Hybrid Authority in the Multilateral System, 10 *Global Environmental Politics* 25-53 (2010); Karin Bäckstrand, Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships, 8 *Global Environmental Politics* 74-102 (2008); Philipp Pattberg, Public-Private Partnerships in Global Climate Governance, 1 *WIREs Climate Change* 279-287 (2010)

[25] Liliana B. Andonova, Michele Betsill & Harriet Bulkeley, Transnational Climate Governance, 9 *Global Environmental Politics* 52-73 (2009); Philipp Pattberg & Johannes Stripple, Beyond the Public and Private Divide: Remapping Transnational Climate Governance in the 21st Century, 8 *Int'l Environmental Agreements* 367–388 (2008)

[26] Jessica F. Green, Order out of Chaos: Public and Private Rules for Managing Carbon, *Global Environmental Politics* 13(2): 1-25 (2013)

[27] Stephen Bernstein, Michele Betsill, Matthew J. Hoffmann & Matthew Paterson, A Tale of Two Copenhagens: Carbon Markets and Climate Governance, 39 *Millennium – Journal of International Studies* 161-173 (2010)

[28] Abbott, Transnational Regime Complex, supra note ; Daniel H. Cole, From Global to Polycentric Climate Governance, 2 *Climate Law* 395 (2011); Elinor Ostrom, Polycentric Systems for Coping with Collective Action and Global Environmental Change, 20 *Global Environmental Change* 550–557 (2010)

[29] Daniel Bodansky, A Tale of Two Architectures: The Once and Future U.N. Climate Change

actions by multiple international institutions, extending the regime complex model: a range of multilateral treaties and IGOs, "clubs" of like-minded states, and bilateral agreements already address climate change in parallel to UNFCCC processes.[30]

Finally, some scholars suggest polycentric "assemblages"[31] or "ensembles"[32] of public and private institutions.[33] Few, however, take the next step: considering how such an assemblage might be structured and operate. Van Asselt & Zelli make a start by suggesting ways to link three groups of climate actors: technology institutions, emissions trading systems and unilateral trade measures.[34] Stewart, Oppenheimer & Rudyk propose a "building block" approach structured around three strategies:[35] (1) forming "clubs" of states and/or private firms to adopt measures that produce economic benefits, while reducing emissions as an incidental co-benefit; (2) causing organizations with non-climate missions to sponsor initiatives that further those missions while again producing incidental emissions reductions; and (3) encouraging dominant market actors, public and/or private, to adopt climate-friendly standards for specific sectors, forcing competitors to follow suit. While these strategies are valuable, the proposal advanced here is broader and less reliant on self-interested non-climate actions.

2. Setting the Stage

a. Key Concepts

i. Regime Complex

A *regime complex* is a group of institutions that address similar issues within a governance domain. In principle, its constituent institutions are "regimes." As originally

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Regime, 43 *Arizona State Law Journal* 697-713 (2011); Robert Falkner, Hannes Stephan & John Vogler, International Climate Policy after Copenhagen: Towards a "Building Blocks" Approach, 1 *Global Policy* 252-262 (2010); Mike Hulme, Moving beyond Climate Change, 52 *Environment* 15-19 (2010); David G. Victor, *Global Warming Gridlock* (Cambridge University Press 2011)

[30] Robert O. Keohane & David Victor, The Regime Complex for Climate Change, 9 *Perspectives on Politics* 7-23 (2011)

[31] William Boyd, Climate Change, Fragmentation and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage, 32 *U. Penn. J. Int'l Law* 457 (2010)

[32] Oren Perez, Private Environmental Governance as Ensemble Regulation: A Critical Exploration of Sustainability Indices and the New Ensemble Politics, 12 *Theoretical Inquiries in Law* 543-79 (2011)

[33] Cole, supra note ; Eric Orts, Climate Contracts, 29 *Virginia Environmental Law Journal* 197-236 (2011); Jacqueline Peel, Lee Godden & Rodney J. Keenan, Climate Change Law in an Era of Multi-Level Governance, 1 *Transnational Environmental Law* 245-280 (2012)

[34] Harro van Asselt & Fariborz Zelli, Connect the Dots: Managing the Fragmentation of Global Climate Governance (2012), available at http://www.earthsystemgovernance.org/publication/van-asselt-harro-connect-dots-managing-fragmentation

[35] Richard B. Stewart, Michael Oppenheimer & Bruce Rudyk, Building Blocks for Global Climate Protection *** (2012)

defined, a regime is a set of principles, norms, rules and decision-making procedures around which actors' expectations converge within a domain such as climate change.[36] Most regimes, however, are centered on specific organizations and agreements, and much of the regime complex literature focuses on institutions of this kind.[37] Here I treat transnational climate organizations – which embody principles, norms, rules and decision-making procedures – as constituting a regime complex.[38]

Regime complex theory has focused predominantly on three relationships among organizations. (1) Institutions are *nested* where one has hierarchical authority over others. For example, the World Trade Organization is hierarchically superior to preferential trade agreements, as it has authority to resolve any rule conflicts. (2) Institutions are *overlapping* where their rules address the same behaviors, but none has superior authority. The WTO and a multilateral environmental agreement that authorizes trade sanctions on non-parties, such as the Montreal Protocol on Substances that Deplete the Ozone Layer, are overlapping: both address national trade measures, perhaps inconsistently, but neither has authority to resolve any conflict between them. (3) Institutions are *parallel* where they have neither relationship; they are not part of a regime complex. Agreements in disparate issue areas, such as the UNFCCC and the Geneva Convention Relative to the Treatment of Prisoners of War, are parallel.

Overlap has been the core concern of regime complex theory. As issue areas and institutional mandates are redefined and new issues arise, institutions that previously operated in parallel can come to overlap. In other instances actors knowingly create overlap.[39] In either case, inconsistent rules create costs for institutions and their members; these are particularly acute among inter-state institutions that administer legally binding rules.[40]

A broader understanding of regime complexes views them as assemblages of institutions that are "loosely coupled" but lack an overarching architecture. In this view, the regime complex stands near the midpoint of a continuum that runs from a single integrated organization to a wholly fragmented array of institutions with no significant

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[36] Stephen D. Krasner, Structural Causes and Regime Consequences: Regimes as Intervening Variables, in Stephen D. Krasner, ed., *International Regimes* 1-22 (Cornell University Press 1983).

[37] Kal Raustiala & David Victor, The Regime Complex for Plant Genetic Resources, 58 *International Organization* 277-309 (2004); Karen Alter & Sophie Meunier, The Politics of International Regime Complexity, 7 *Perspectives on Politics* 13-24 (2009); Keohane & Victor, supra note

[38] See Abbott, Transnational Regime Complex, supra note **

[39] Laurence R. Helfer, Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking, *Yale Journal of International Law* **29** 1-83 (2004)

[40] Traditional regime complex scholarship focuses heavily on such institutions.

linkages.[41] Although certain constituents may have particularly strong influence, a regime complex is fundamentally polycentric, consisting of multiple centers of authority, each involving different actors or actor combinations.[42]

This broader version of regime complex theory, which I adopt here, downplays the traditional focus on overlapping rules; instead it considers the causes and effects of institutional fragmentation or multiplicity and means of managing it, like those proposed here.[43] It is also better suited to transnational institutions, which adopt voluntary rather than legally-binding rules and engage in operational activities in addition to rule-making.

ii. Transnational

An institution, regime or regime complex is *transnational* when (a) private actors (e.g., environmental NGOs, business firms, technical experts) and/or sub-national governmental units (e.g., cities, provinces) play significant roles in its governance, instead of or in addition to states and/or intergovernmental organizations (IGOs); and (b) it operates across national borders. The growing literature on transnational law and governance includes many understandings of the "transnational" – far more than can be reviewed here. These are more or less encompassing, sometimes including public international law and inter-state institutions, sometimes excluding them. These understandings also focus on varied categories and aspects of legal rules, legal processes, political actors, institutions and governance.[44] For present purposes, however, the relatively simple definition set out above is apt. It is widely used in scholarship on transnational governance, even on transnational climate governance.[45]

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[41] Keohane & Victor, supra note .

[42] Abbott, Transnational Regime Complex, supra note ; Ostrom, supra note

[43] Cf. van Asselt, Pattberg, Biermann & Zelli, Fragmentation, supra note

[44] See, e.g., Philip Jessup, *Transnational Law* (Yale University Press 1956); Harold Hongju Koh, Transnational Legal Process, 75 *Nebraska Law Review* 181 (1996); Gregory Shaffer, Transnational Legal Process and State Change, 37 *Law & Social Inquiry* 229-64 (2012); Gregory Shaffer & Daniel Bodansky, Transnationalism, Unilateralism and International Law, 1(1) *Transnational Environmental Law* 31-41 (20**); Eric Dannenmaier, Constructing Transnational Climate Regimes, in Gunther Handl, Joachim Zekoll & Peer Zumbansen, *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization* (2012); Peer Zumbansen, Transnational Legal Pluralism, 10 (2) Transnational Legal Theory 141-89 (2010)

[45] See, e.g., Thomas Risse-Kappen, ed., *Bringing Transnational Relations Back In: Nonstate Actors, Domestic Structures and International Institutions* (Cambridge University Press 1995); Philipp Pattberg, *Private Institutions and Global Governance* (Cheltenham, UK and Northampton, MA; Edward Elgar 2007); Pattberg & Stripple, Beyond the Public and Private Divide, supra note , at 367 note 3; Liliana B. Andonova, Michele M. Betsill & Harriett Bulkeley, Transnational Climate Governance, *Global Environmental Politics* 9(2): 52-73 (2009); Harriett Bulkeley et al., Governing climate change transnationally: assessing the evidence from a database of sixty initiatives. *Environment and Planning C: Government and Policy* 30 (4): 591–612 (2012); Abbott, Transnational Regime Complex, supra note .

Transnational institutions vary widely in terms of actor composition. Private actors establish and make up many institutions. In many cases those actors are relatively homogeneous: e.g., environmental NGOs (Climate, Community & Biodiversity Alliance [CCBA]) or business groups (Verified Carbon Standard [VCS]). A significant number of institutions bring together sub-state governments (ICLEI – Local Governments for Sustainability), often of a particular type (C40 Cities Climate Leadership Group). In other cases heterogeneous actors combine to establish and govern institutions: e.g., NGOs and business associations together (Greenhouse Gas Protocol [GHGP]), or even broader multi-stakeholder groupings (Roundtable on Sustainable Biomaterials [RSB], Forest Stewardship Council [FSC]).[46] In addition, IGO and/or national officials participate in transnational public-private partnerships (Global Gas Flaring Reduction Partnership; Renewable Energy Policy Network for the 21st Century [REN 21]). This is consistent with the definition of "transnational," which leaves room for participation by states, IGOs and other public entities.

Increased cooperation with IGO officials and organs would greatly enhance the TRCCC, while furthering complementarity.[47] While IGO officials and organs, including treaty secretariats, fall outside the definition of "transnational," they are non-state actors. States often grant them modest independence,[48] and they gain further autonomy and influence from their expertise and focality.[49] IGO officials administer climate-relevant norms for private actors (OECD Guidelines for Multinational Enterprises) and encourage private commitments (UN Global Compact). IGO officials can also be effective regime entrepreneurs. They have catalyzed the formation of transnational institutions such as the Global Reporting Initiative (GRI), Principles for Responsible Investment (PRI) and Equator Principles; they support those institutions on an ongoing basis.[50] The UNFCCC Secretariat has generally limited itself to supporting intergovernmental processes, in line

[46] See Abbott & Snidal, Strengthening International Regulation, supra note **. The RSB Board includes representatives of seven different stakeholder groups.

[47] Another valuable ally would be a *transgovernmental network* on climate. A transgovernmental network is an association of government agencies – e.g., environment ministries; it is not formed by or made up of states as such. *See* Anne-Marie Slaughter, *A New World Order* (Princeton University Press 2005). Transgovernmental networks share information, coordinate rulemaking and other domestic activities, and support weaker member agencies. They are important centers of governance in many areas. Unfortunately, national and supranational environment agencies have not created strong transgovernmental relationships on climate policy.

[48] Kenneth W. Abbott & Duncan Snidal, Why States Act Through Formal International Organizations, 42 J. Conflict Res. 3-32 (1998)

[49] Frank Biermann & Bernd Siebenhüner, eds., *Managers of Global Change: The Influence of International Environmental Bureaucracies* (MIT Press 2009)

[50] Cornis van der Lugt & Klaus Dingwerth, Governing Where Focality Is Low: UNEP and the Principles for Responsible Investment, unpublished manuscript February 2013

with its narrow mandate.[51] Recently, however, it launched the Momentum for Change Initiative, promoting climate partnerships that benefit the poor.[52]

iii. Bypassing and Managing

A TRCCC would *bypass states* by addressing norms and programs directly to sub-state and/or societal actors, rather than to states. For example, transnational institutions could adopt and promote coordinated emissions standards for city governments, business firms and other public and private actors; such standards would not be legally binding, but could be backed by economic, political or social incentives. This represents a very different governance model than arrangements such as the Kyoto Protocol, which are adopted by states, apply to states and rely on national governments for implementation vis-à-vis non-state actors. Beyond standard-setting, transnational institutions could engage with cities, firms and other actors, providing them with information, disseminating their expertise, providing them voice, creating learning opportunities and strengthening their commitment. Transnational institutions could also assist actors that lack capacity for complex mitigation and adaptation measures.

A TRCCC would *manage states* – in a modest sense – by persuading and pressuring national governments to make and implement international climate commitments and to take other relevant domestic actions. To influence state behavior, it is necessary to modify cost/benefit calculations, domestic political interests, and/or principled beliefs or values. Transnational institutions can effectively do all three. Many transnational organizations are well suited to providing information and knowledge that influence state interest calculations, as in traditional lobbying. Many are experienced in advocacy, which changes domestic political calculations by educating and mobilizing NGOs, consumers, business leaders and the public to demand government action and raise the political costs of inaction. And transnational organizations frequently invoke norms and values, applying "shaming" strategies that lead governments to redefine their interests and identities over time.

An important strategy that draws on all three approaches is the creation of "demonstration effects."[53] Voluntary standards for business, operational projects and other transnational activities, if successful, can have a range of significant political effects. They vividly demonstrate the benefits, feasibility and cost-effectiveness of norms and activities, as well as their normative appropriateness and appeal.[54] At the

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[51] UNFCCC Art. 8

[52] http://unfccc.int/secretariat/partneships/items/6621.php. It has also joined the Global Compact as co-convenor of Caring for Climate, discussed below.

[53] Walter Mattli & Ngaire Woods, eds., *The Politics of Global Regulation* (Princeton University Press 2009)

[54] The Momentum for Change program adopts similar goals: http://unfccc.int/secretariat/momentum_for_change/items/6214.php

same time, they reveal shortcomings in public rules and programs, highlighting advantageous opportunities that governments have failed to seize (perhaps due to cozy relationships with private interests),[55] and generating public demand to do so. Advocates can also leverage extreme weather events and other natural demonstration effects, highlighting government failures and mobilizing public demand.

b. Transnational Climate Institutions

Transnational climate governance has blossomed in the last two decades. A recent special issue[56] identifies 60 transnational climate institutions applying the definition used here.[57] Abbott modifies that database, analyzing nearly 70 institutions.[58] Hoffman catalogues some 60 "climate experiments," most involving IGOs or transnational organizations.[59] Green analyzes relationships among 30 transnational institutions that set standards for carbon measurement and management.[60] Transnational organizations operating in related issue areas also take climate-relevant actions: e.g., on biofuels (RSB), agricultural practices (GlobalGAP; Sustainable Agriculture Network), and social/environmental reporting (GRI).

These institutions already engage in numerous activities that "bypass states." Of particular significance, they adopt and administer rules for non-state actors, including rules for carbon-offset projects (VCS, CCBA), emissions accounting (GHGP) and disclosure (GRI). While these rules have regulatory purposes, however, virtually all are voluntary; I refer to them as "regulatory standards."[61] Again, institutions in other domains also adopt climate-relevant standards, in areas such as sustainable forest management (FSC, CarbonFix, Natural Forest Standard).

Transnational institutions also perform important operational functions that engage and benefit non-state actors. Notably, they manage the voluntary carbon market, which complements the Clean Development Mechanism (CDM), EU Emissions Trading System and other public efforts.[62] The voluntary market is structured by private offset and

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[55] Mattli & Woods, supra note , at 22-26

[56] Harriet Bulkeley, ed., Between Public and Private? Governing Global Environmental Issues Transnationally, 30 *Government and Policy: Environment and Planning C* 556-674 (2012)

[57] Harriet Bulkeley et al., Governing Climate Change Transnationally, supra note . See also Thijs Etty, Veerle Heyvaert, Cinnamon Carlarne, Dan Farber, Jolene Lin & Joanne Scott, Transnational Dimensions of Climate Governance, 1 *Transnational Environmental Law* 235-418 (2012)

[58] Abbott, Transnational Regime Complex, supra note

[59] Matthew J. Hoffmann, *Climate Governance at the Crossroads* (Oxford University Press 2011)

[60] Green, Order Out of Chaos, supra note

[61] Kenneth W. Abbott & Duncan Snidal, The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State, in Mattli & Woods, supra note at 44-88. Some sub-state government associations, such as the Regional Greenhouse Gas Initiative (RGGI), promulgate binding rules, but most do not.

[62] Bernstein et al., Tale of Two Copenhagens, supra note ; William Boyd & James Salzman, The

accounting standards,[63] such as VCS and CCBA, and by private organizational structures, including carbon credit registries (The Climate Registry; Markit Environmental Registry) and trading platforms (Carbon TradeXChange, Chicago Climate Exchange until 2010).

In addition, many transnational institutions produce and disseminate information valuable to non-state actors. The Carbon Disclosure Project disseminates data on firms' environmental performance, aiming to spur continuous improvement. The World Business Council on Sustainable Development (WBCSD) provides a forum for companies "to share best practices on sustainable development issues." ICLEI provides learning opportunities, technical assistance and capacity building for local governments.

Transnational organizations also engage in activities designed to "manage states." First, many activities of the "bypassing states" variety, including successful regulatory standards and operational programs, simultaneously produce demonstration effects. Informational activities disseminate these lessons, stimulating demand for public action.

In addition, transnational organizations engage in governance innovation by promoting new policy solutions and by sponsoring and financing demonstration projects (Clinton Climate Initiative; Global Sustainable Electricity Partnership; Renewable Energy & Energy Efficiency Partnership [REEEP]). Some programs are explicitly experimentalist: the Rockefeller Foundation's Asian Cities Climate Change Resilience Network (ACCCRN) focuses on "experimenting and testing" approaches to building resilient institutions for the poor, and on "demonstrating, and disseminating knowledge" about innovative solutions.[64] Finally, transnational organizations engage in varied forms of advocacy aimed at states and non-state actors alike (Climate Action Network; International Emissions Trading Association; Center for Climate and Energy Solutions).

3. Structuring the Transnational Regime Complex

a. Polycentric Ordering

Transnational climate institutions are products of self-organization; they constitute a "polycentric order" in a field where hierarchical authority and strong coordination are lacking.[65] Yet transnational institutions as a group are very weakly ordered.

Curious Case of Greening in Carbon Markets, 41 *Environmental Law* 73-94 (2011); Molly Peters-Stanley & Katherine E. Hamilton, *Developing Dimension: State of the Voluntary Carbon Market 2012,* (2012), available at http://www.forest-trends.org/publication_details.php?publicationID=3164

[63] Jessica F. Green, Private Standards in the Climate Regime: The Greenhouse Gas Protocol, 12 *Business and Politics* 12(3), Article 3 (2010)

[64] http://www.acccrn.org/about-acccrn/background

[65] Victor Galaz, Beatrice Crona, Henrik Osterblom, Per Olsson & Carl Folke, Polycentric Systems and Interacting Planetary Boundaries – Emerging Governance of Climate Change – Ocean Acidification – Marine Biodiversity, 81 *Ecological Economics* 21-32 (2011)

Galaz et al. distinguish four ideal-typical levels of ordering based on the characteristic functions performed in each.[66] Higher levels support more ambitious activities, but require stronger relationships among participants, more coordination and collaboration, and thus greater trust and investment. In polycentric ordering, however, no external authority can impose coordination: influential and committed participants must generate it.

Individual transnational climate institutions operate at all four levels of ordering.

(1) At level 1, actors merely exchange information about common problems and activities, enabling them to adjust their policies and actions to one another if they wish, but without express coordination. NGOs, business firms, sub-state governments, IGO officials and other actors share climate and governance information in this decentralized fashion.

(2) At level 2, actors coordinate informally, without explicit agreements. These relationships too are based on information exchange, but here actors anticipate coordinated decision-making. Relatively loose institutions such as the World Mayors Council on Climate Change and Green Economy Coalition resemble this level of ordering.

(3) At level 3, actors establish formal agreements, organizations or partnerships to collaborate on joint projects. Galaz et al. refer only to "field" or operational projects and knowledge production, but adopting and administering regulatory standards reflects a similar degree of ordering. Here, because joint projects require collaboration, "a few central actors emerge to coordinate the activities and communication of the partnership."[67] Major transnational climate institutions including CCBA, VCS, RSB and REEEP operate at this level.

(4) Finally, at level 4, relationships among actors are strong enough to address novel and dynamic problems and to manage conflicts. Formal agreements and partnerships remain central, and core actors still steer collaboration. Yet fewer actors are willing to participate in these demanding arrangements; some remain outside, maintaining weaker links. Established transnational organizations such as FSC, GHGP and GRI operate at this level.

Many transnational climate institutions, then, reflect relatively high levels of ordering – levels 2, 3 and 4. Collectively, however, their ordering is much weaker. Transnational climate institutions may constitute an organizational field, observing and acting in relation to one another.[68] They may even constitute a regime complex, "loosely

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[66] Id.

[67] Id. at **

[68] Tim Bartley, Institutional Emergence in an Era of Globalization: The Rise of Transnational Private Regulation of Labor and Environmental Conditions, 113 *American Journal of Sociology* 297-351 (2007); Klaus Dingwerth & Philipp Pattberg, World Politics and Organizational Fields:

coupled" by common principles and relationships such as "conscious parallelism," but without any overarching architecture.[69] Yet they remain highly fragmented, with limited coordination and collaboration.

Weak ordering is most clearly manifested in institutional overlap (governance gaps are equally symptomatic, but less easily identified). Multiple organizations certify carbon offset credits and seek emission reduction pledges. Multiple organizations also address sectors such as forestry and renewable energy – through standards, demonstration projects and other activities – from modestly differing perspectives. Multiple associations of sub-state governments, even of city governments, address mitigation. In all these areas, overlapping institutions operate independently, often competitively. And new organizations continue to enter crowded, high-profile areas, e.g., the Natural Forest Standard for forest carbon offsets, rather than underserved areas such as adaptation.[70]

To be sure, transnational institutions frequently define their missions to limit overlap: for example, the Natural Forest Standard considers only non-commercial projects in natural forests. Many offset schemes explicitly recognize other standards, including CDM standards, as satisfying some of their requirements.[71] A few – such as GRI and the Carbon Disclosure Project – are informally aligning their standards, reducing the burden on actors that adhere to both. But these are relatively weak forms of ordering; stronger collaboration is rare.

Enhancing the TRCCC would entail strengthening linkages among transnational institutions and promoting coordination and collaboration. The primary linkages would be *horizontal*, involving relationships among organizations of a particular type, such as private standard-setting or project institutions based in civil society and/or business; public-private partnerships; and sub-national government associations. Such relationships would move the regime complex to a higher level of ordering, allowing constituent organizations to engage in governance activities characteristic of levels 2-4.

Vertical linkages between organizations of different types would also be significant. In addition to direct collaboration in public-private partnerships, these would include support for weaker organizations, catalyzing new institutions in underserved areas, and

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The Case of Transnational Sustainability Governance, 15 *European Journal of International Relations* 707-744 (2009)

[69] Abbott, Transnational Regime Complex, supra note

[70] Kenneth W. Abbott, Jessica F. Green & Robert O. Keohane, Organizational Ecology and Organizational Strategies, unpublished manuscript 2013

[71] Green, supra note

steering institutions at lower levels. These are tasks for which IGO officials are especially well suited.[72]

To be clear, I do not argue for a tightly integrated regime complex, far less a true regime. As discussed further below, strong integration is unlikely, due to divergent preferences and organizational incentives for independence. More importantly, decentralization offers important advantages tight integration would sacrifice. These include the flexibility to address new and dynamic issues and to fine-tune standards and operations to specific situations; the ability to create productive "clubs" of actors with common interests and values; and opportunities for experimentation and learning.[73] In general, I favor a version of the principle of *subsidiarity*: establish the lowest level of institutional ordering that enables the performance of desired social functions.

b. Multi-level governance

Horizontal linkages among organizations of particular types will produce a multi-level governance system.[74] Transnational organizations will operate in coordinated and collaborative fashion, as networks or even as integrated institutions, at different levels of authority (e.g., province, city, industry, firm) and different physical scales. Vertical relationships will promote coordination across levels.

Hooghe and Marks contrast two broad types of multi-level governance.[75] Type I, exemplified by federal systems, includes few levels; institutions at each level have multiple functions, and only one institution is relevant at any scale. Type II, exemplified by current transnational governance, includes many functionally differentiated institutions operating at fine gradations of scale, even the same scales. The two types have contrasting benefits: Type I systems are clear, provide economies of scale, and are stable and durable; Type II systems are highly flexible and allocate tasks to specialized institutions, but are fluid and impermanent. A strengthened TRCCC could be structured to combine the best of both systems: Type 1½ multi-level governance.

The literature on multi-level governance highlights its ability to match the scale of governance to that of externalities, public goods and other policy problems, and to the preferences of distinct populations.[76] In the present context, however, multi-level governance has additional virtues. It facilitates *bypassing states* by enabling linked

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[72] Kenneth W. Abbott & Duncan Snidal, International Regulation without International Government: Improving International Organization Performance through Orchestration, 5 *Review of International Organizations* 315-344 (2010)

[73] Abbott & Snidal, Strengthening International Regulation, supra note ; Keohane & Victor, supra note

[74] Liesbet Hooghe & Gary Marks, Unraveling the Central State, But How? Types of Multi-Level Governance, 97 Amer. Pol.Sci. Review 233-243 (2003); Peel et al., supra note .

[75] Id. at **

[76] Id. at **

transnational institutions and networks to penetrate the state at multiple levels, directly engaging and targeting societal and sub-state actors. And it facilitates *managing states* by enabling linked transnational institutions and networks to apply political and normative pressures from multiple levels and directions. Cooperation with IGO officials and organs would add an additional level, expanding both impacts.

c. Relations with the climate regime

An enhanced TRCCC would function best as a complement to the inter-state climate regime and other relevant international institutions and agreements. Most transnational climate organizations already play complementary roles. Transnational standards for offsets, emissions accounting, REDD projects and similar matters are consistent with international principles and rules, although often more stringent; some explicitly recognize international rules. But transnational standards target non-state actors rather than states; they are "force multipliers" for international regimes, extending their rules and policies into the private sector and enhancing national implementation. Transnational operational activities are likewise complementary. Voluntary carbon market registries parallel CDM procedures in the private sector; organizations managing renewable energy projects aid implementation of national commitments.

Transnational governance can also facilitate inter-state action. Transnational demonstration effects reveal the feasibility, benefits and appropriateness of rules, programs or activities. Transnational norms and programs also modify the political calculations of interest groups within states, converting participants from potential opponents to supporters. Finally, transnational standards and programs provide focal points that facilitate inter-state agreement.

Conversely, the "shadow of hierarchy" is an essential driver of non-state action.[77] Business firms, in particular, often lack incentives for meaningful voluntary regulation unless they believe "the state" will otherwise intervene. Advances in international climate negotiations thus increase the impact of transnational standards. Such advances also provide incentives for inter-institutional coordination: by aligning standards and programs with likely public action, transnational institutions can reduce future switching costs for participants. Here too, predictable state action provides focal points that facilitate transnational coordination.

Ideally, international institutions would integrate transnational organizations into an integrated global governance system. To date, however, international institutions have failed to recognize the value of transnational governance.[78] Major environmental

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[77] Tanja Börzel & Thomas Risse, Governance Without a State: Can It Work?, 4 *Regulation & Governance* 113-134 (2010); Tim Büthe, Private Regulation in the Global Economy: A (P)review, 12 *Business and Politics* Article 2 (2010)

[78] Abbott, Engaging, supra note

conventions acknowledge the role of non-state actors in policy formulation and implementation, but make few provisions for transnational action. Decisions under the UNFCCC and Kyoto Protocol endorse stakeholder involvement, but mainly in areas such as finance and technology. The Durban Platform envisions an inter-state process leading to an inter-state instrument. Sustainable development institutions are more receptive, although the Rio+20 decisions on the institutional framework remain highly state-centric. The 2002 World Summit on Sustainable Development promoted "Type II partnerships" to implement sustainability norms; however, many see these as having little impact: eligibility criteria were lax; there were no effective supervision or support and little coordination among partnerships.[79] Rio+20 turned to "voluntary commitments,"[80] but criteria, supervision, support and coordination remain weak.

Transnational institutions can also partially substitute for inter-state action. Some substitution occurs naturally: for example, while transnational standards complement the Kyoto Protocol within states that have ratified it, they (partially) substitute for Kyoto in those that have not. Many transnational standards both complement and substitute: CCBA standards are consistent with CDM rules in areas such as mitigation and additionality, but also address social and biodiversity issues the CDM largely ignores.

Transnational institutions help fill governance gaps left when international negotiations fail or produce insufficient results. For example, FSC adopted sustainable forest management standards after states failed to adopt binding forest rules at Rio in 1992. The World Resources Institute and World Business Council on Sustainable Development adopted the GHGP measurement standard when UNEP failed to produce a similar tool.[81] VCS recently adopted a standard for "jurisdictional REDD" because international rules were lagging behind a recognized need.[82]

Even these actions can also be seen as complements: they generate and test governance innovations, serving as reservoirs of ideas and knowledge on which international institutions can later draw.[83] Unlike reservoirs, however, transnational institutions are active agents. They engage in advocacy and create demonstration effects that generate political pressure. In a real sense, transnational institutions provide intellectual and political leadership for inter-state negotiations.

4. Assessing the Potential of the Transnational Regime Complex

[79] Liliana B. Andonova & Marc Levy, Franchising Global Governance: Making Sense of the Johannesburg Type II Partnerships, *Yearbook of International Cooperation on Environment and Development* (2003)

[80] http://sustainabledevelopment.un.org/aboutcommitments.html

[81] Green, supra note , (2010) at 14

[82] http://v-c-s.org/news-events/news/groundbreaking-jurisdictional-redd-requirements-released.

[83] Green **

An enhanced TRCCC would have significant benefits for climate governance, yet it would be no panacea. Many transnational institutions have significant weaknesses, and transnational governance faces difficult challenges. Inter-institutional cooperation also faces serious barriers. Yet these are not reason to abandon efforts to strengthen the transnational regime complex, merely to moderate expectations. Efforts to strengthen the regime complex would also help transnational organizations overcome some of the problems they face, as discussed below.

a. The impact of transnational institutions

A number of transnational institutions appear quite substantial on important metrics; their actual impact, however, is uncertain. For example, Caring for Climate is an initiative of the UN Global Compact, which UNEP and the UNFCCC now co-manage. Nearly 350 companies from 65 countries, many large and prominent, have endorsed its principles.[84] But those principles are very general and not subject to auditing or enforcement. Similarly, 40 leading insurance companies have adopted the Climate Wise principles, which include supporting climate awareness among customers, incorporating climate into investment strategies and public reporting.[85] But concrete effects are difficult to identify. GHGP is the most widely used corporate-level emissions reporting standard; 80% of Global 500 companies apply it in emissions reports. Yet the practical impact of those reports is unclear. The same can be said of the GRI reporting standard, used by nearly 5,500 organizations.[86] ICLEI has over 1,000 member governments;[87] yet it imposes no mandates and the impact of its tools and information exchanges is difficult to judge.

Other transnational climate institutions produce benefits that are real but modest; they can be viewed as glasses half-full or half-empty. For example:

- The Verified Carbon Standard has registered over 1,000 offset projects; it has issued verified credits for over 800 of these, representing a total of 120 million tons of CO2 equivalent emissions reductions.[88] 43 million tons were contracted in 2012 alone.[89]
- The CCBA standard for offset projects addresses social and biodiversity impacts of forestry and agriculture projects; it supplements mitigation standards such as VCS. The standard is rigorous and includes independent audit requirements. CCBA has validated 70 projects in 34 countries, representing 40 million tons of CO2 reductions

[84] http://caringforclimate.org/about/list-of-signatories/
[85] http://www.climatewise.org.uk/about/
[86] http://database.globalreporting.org
[87] http://www.iclei.org/get-involved/join-iclei.html
[88] http://www.vcsprojectdatabase.org
[89] Molly Peters-Stanley & Daphne Yin, Maneuvering the Mosaic: State of the Voluntary Carbon Markets 2013, available at www.forest-trends.org

annually; additional projects are currently under review.[90] Other organizations are developing standards that address additional social aspects of offset projects.[91]

- REEEP has financed 180 clean energy projects in 58 developing countries; some function as demonstration projects. It has disbursed over $28 million and attracted twice that amount in co-financing.[92]
- 300 cities from around the world have registered mitigation/adaptation plans and/or climate commitments on the Carbon*n* Cities Climate Registry.[93]
- The Carbon Disclosure Project gathers information on major companies' carbon emissions and mitigation programs, based on annual questionnaires subject to verification standards, and distributes it to over 700 institutional investors.[94]
- The Global Gas Flaring Reduction Partnership, led by the World Bank, brings together nearly 20 natural gas-producing countries, leading global oil companies and other IGOs. Most members have pledged to reduce flaring and develop alternatives that benefit the poor; members have in fact achieved significant reductions.[95]

Again, these achievements may be small compared to the scale of the problem, but they are achievements nonetheless, especially for young institutions.

The same balanced assessment must apply to the voluntary carbon market. While the volntary market is substantial, it is much smaller than "compliance" markets such as the European Trading System and CDM. But both of those schemes have undergone major recent upheavals, due to excess credits and the end of the first Kyoto Protocol commitment period respectively, leading carbon prices to collapse.[96] The voluntary market, in contrast, has been relatively stable: volumes in 2012 increased somewhat from 2011, although remaining below all-time highs, while prices declined only moderately.[97]

Finally, some transnational climate institutions have limited impact by any measure. For example, SocialCarbon, established in Brazil over a decade ago, only certified its first

[90] https://s3.amazonaws.com/CCBA/CCB_Standards_FactSheet.pdf
[91] Peters-Stanley & Yin, supra note
[92] http://www.reeep.org/reeep-brief-overview
[93] http://citiesclimateregistry.org/home/
[94] https://www.cdproject.net/en-US/Programmes/Pages/CDP-Investors.aspx
[95] http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTOGMC/EXTGGFR/0,,contentMDK:21022944~menuPK:828161~pagePK:64168445~piPK:64168309~theSitePK:578069,00.html
[96] World Bank, *State and Trends of the Carbon Market 2012*. New carbon trading programs, e.g., in California and Australia, should increase demand for compliance credits.
[97] Offsets covering 101 million CO2 equivalent tons were contracted in 2012, increasing 4% year-over-year; total market value declined by 11% to $523 million. Peters-Stanley & Yin, supra note

offset project outside that country in 2011.[98] The Climate Fix standard for climate forestation projects has been used for only 11 projects.[99]

b. Challenges for transnational governance

The modest size and impact of many transnational climate institutions reflect the challenges they face. Many of these stem from the voluntary nature of transnational governance. Regulatory standards schemes, for example, must attract voluntary adherents from business and other targets of regulation. To do so, they must offer benefits, such as enhanced reputation, improved access to consumers, lower transactions costs or avoidance of mandatory regulation. Similarly, the voluntary carbon market depends on buyers motivated by reputation, industry leadership, potential regulation or climate risks to suppliers, as well as environmental values.[100] Most transnational schemes likewise depend for financing on foundations and private donations. So long as the incentives for voluntary action are limited, the scalability of transnational governance will be constrained.[101]

Consumer and public demand are significant limiting factors. Consumers, for example, must be educated as to the nature of a problem (e.g., carbon emissions embedded in products) and the mechanism designed to address it (e.g., a carbon label); they must also be stimulated to choose labeled products, even at higher prices.[102] Consumers may be confused by multiple issues, institutions and labels, and easily deceived by self-serving programs.[103]

A second contributing factor is the makeup of transnational climate institutions. Homogeneous sets of actors, such as environmental NGOs or business firms, have established and manage many such institutions.[104] Yet single-actor institutions have characteristic weaknesses. Business schemes, for example, may possess financial resources and management expertise, but are often relatively undemanding; NGO

[98] http://www.southpolecarbon.com/_downloads/PR110705_354SocialCarbon.pdf

[99] http://www.carbonfix.info/Project.html?PHPSESSID=4g0kp5isbpd4d9i0ufl4vij957. Carbon Fix was acquired by the Gold Standard in 2012.

[100] Id.

[101] Tim Büthe, Global private politics: a research agenda, *Business and Politics* 12(3), Article 12 (2010); Green, Private standards, supra note

[102] NGOs and other norm entrepreneurs frequently perform these tasks.

[103] Tim Büthe, Global private politics, supra note ; Private Regulation, supra note . Some observers see labeling programs as inappropriately extending market structures. E.g., Doris Fuchs & Agni Kalfaggiani, The Causes and Consequences of Private Food Governance, 12 *Business and Politics* Article 5 (2010)

[104] Abbott, Transnational Regime Complex, supra note

schemes are typically more stringent, but are viewed with suspicion by targets, limiting uptake.[105]

Finally, states may resist transnational governance. Even voluntary norms addressing private actors can reduce state control of domestic economic activity or be perceived as invading sovereignty; they are sometimes opposed even by governments generally favorable to environmental action.[106] The problem is worse in authoritarian states, including China, where civil society is tightly controlled. There, transnational institutions may be unable to operate at all, or may be isolated from local society or coopted by governmental bodies.[107] As the regime complex becomes stronger, state resistance may well increase.

Institutional linkages and cooperation could, however, help transnational organizations overcome some of these challenges. I consider several potential benefits in the remainder of this subsection.

i. Information sharing

Information sharing and learning are core components of polycentric ordering and should be central to the TRCCC.[108] Transnational governance is evolving rapidly; most regulatory standards schemes have been created since the 1980s,[109] climate schemes even more recently.[110] They can rightly be seen as experiments.[111] Information exchange and collaborative knowledge production are important for organizational learning. In addition, transnational institutions exhibit vast capacity differentials. Information sharing can build the capacities of weaker institutions, and thus of the regime complex as a whole. Information sharing can also lead to adjustments that limit the adverse effects of fragmentation, including inefficient duplication and high costs for targets and consumers.

ii. Bypassing states

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105 Abbott & Snidal, Governance Triangle, supra note .

106 See, e.g., Lars H. Gulbrandsen, *Transnational environmental governance: the emergence and effects of the certification of forests and fisheries* 127-28 (2010) (Norwegian resistance to Marine Stewardship Council).

107 For recent examples from China, see Sander Chan, Partnerships for Sustainable Development: Global Diffusion and Local Adaptation, IVM Newsletter No. 2 (June 2013), available at http://www.ivm.vu.nl/en/news-and-agenda/IVM-Newsletter/latest-issue-newsletter/Environmental-Policy-Analysis/index.asp

108 Galaz et al., supra note

109 Abbott & Snidal, Governance Triangle, supra note

110 Most of the transnational organizations identified in Bulkeley et al., supra note , and in Hoffman, *Climate Governance*, supra note , were created since 2001-02. Most voluntary carbon market organizations were established even more recently. Green, supra note

111 Hoffman, *Climate Governance,* supra note

Cooperation would benefit standards organizations throughout the regulatory process.[112] Coordination allows organizations to adopt consistent and mutually supportive standards, minimizing transactions costs, gaps and overlaps. Collaboration can improve implementation through support for targets; it can similarly improve monitoring, for both compliance and learning. Coordination also helps organizations monitor one another, helping to protect against "sham" schemes and capture. Finally, coordination enhances material and reputational incentives for adherence to voluntary standards, as by promoting common, widely recognized labels and facilitating public communication and peer pressure. Information dissemination to public audiences facilitates inter-scheme comparisons by consumers, NGOs and other interested groups, driving a race to the top.[113] Collaboration increases the potential of demonstration projects, providing economies of scale.

iii. Managing states

Managing states turns centrally on information. As Keck & Sikkink observe, advocates use shared information, knowledge and ideas to change the contexts in which states make policy, e.g., through cognitive framing, provision of politically useful information, and "symbolic politics" (dramatizing an issue for public audiences).[114] More concretely, advocacy organizations can heighten their influence by sharing information on strategies and tactics and coordinating campaigns. Demonstration effects likewise turn on information, in planning, execution, collaboration and dissemination.

The literature on transnational advocacy networks highlights the importance of linkages.[115] When NGOs face recalcitrant governments in areas such as human rights or environmental protection, transnational linkages allow them to reach out to allies abroad. In what Keck & Sikkink call the "boomerang" approach, organizational allies respond by exerting material and normative leverage on governments. When allies operate at multiple levels, as in a multi-level governance system, they can exert leverage at multiple points. Allies also provide material and ideational resources, influencing domestic politics. Diverse organizations, not only NGOs, can utilize boomerang processes.

iv. Vertical linkages

Relationships between institutions at different levels can increase effectiveness and legitimacy. IGOs and other highly legitimate organizations can "steer" lower-level and less established institutions.[116] Such steering can help keep transnational standards

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[112] Abbott & Snidal, Governance Triangle, supra note

[113] Christine Overdevest, Comparing Forest Certification Schemes: The Case of Ratcheting Standards in the Forest Sector, 8 *Socio-Economic Review* 47-76 (2010)

[114] Keck & Sikkink, supra note

[115] Keck & Sikkink, supra note

[116] Abbott, Engaging, supra note ; Abbott & Snidal, International Regulation, supra note

consistent with publicly approved norms.[117] It can also encourage "good governance" within transnational institutions, promoting principles such as transparency, public consultation and the incorporation of Southern voices. Finally, steering can promote inter-institutional coordination, offsetting organizational incentives.

Vertical linkages also allow for the transmission of information, concerns and ideas from individuals, communities and organizations "on the ground" to higher-level institutions. Upward flows improve the information available to decision-makers, while enhancing voice for marginalized groups. In polycentric governance, even global problems such as climate change must be addressed at multiple scales, including small local scales: small-scale communities have important advantages in collective action, and take actions appropriate to their social and ecological contexts.[118] Vertical information flows allow higher-level institutions to disseminate the results of replicable local actions and scale up widely applicable local solutions.

c. Barriers to institutional collaboration

As ordering moves from information exchange and informal coordination (levels 1-2) to collaboration on standards and projects (levels 3-4), actors and organizations must invest significant resources in relationship-building.[119] Higher ordering also involves reciprocal commitments, which expose organizations to risks of non-performance and require mutual trust. An articulated TRCCC organized on the basis of subsidiarity should moderate these requirements, facilitating cooperation. Nonetheless, while committed organizations may willingly make the necessary commitments, others may choose not to participate. Even among committed actors, deep collaboration can require costly "confidence-building measures."

In addition, transnational institutions, like all institutions, pursue two sets of goals, which they must constantly balance. First, institutions pursue *substantive goals*, here relating to climate change. In general, as just discussed, cooperation helps institutions achieve their substantive goals. However, institutions are composed of actors with varied interests and values; even organizations with similar overall goals may disagree over priorities, strategies and activities.[120] In particular, climate institutions based in business and in civil society are unlikely to see eye-to-eye, making cooperation challenging. Second, institutions pursue *organizational goals*, seeking to ensure their own continuance and to increase their resources and influence. Transnational institutions, for example,

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[117] Most private climate standards recognize or hew closely to public rules, to enhance legitimacy and minimize switching costs for adherents.

[118] Ostrom, supra note ; Elinor Ostrom, Beyond Markets and States: Polycentric Governance of Complex Economic Systems, 100 *American Economic Review* 641–672 (2010)

[119] Galaz et al., supra note

[120] This helps explain why international and transnational climate institutions are so numerous and diverse. Keohane & Victor, supra note

compete for adherents, resources and reputation, potentially producing pathological effects such as institutional proliferation, overlap and a focus on high-profile issues.

5. Operationalizing the Transnational Regime Complex

To overcome the barriers to inter-institutional cooperation and enhance the impact of transnational institutions, leading organizations need a strategy and a toolbox of techniques. Subsection (a) calls for "regime entrepreneurs" to take the lead in strengthening the regime complex; subsection (b) proposes the strategy of orchestration; and subsection (c) suggests incentives and tools of influence that regime entrepreneurs or orchestrators can deploy to strengthen institutional linkages and induce non-state actors to accept transnational norms and programs.

a. Regime entrepreneurs

Given the barriers to institutional cooperation, self-organization is unlikely to produce a more highly ordered TRCCC. Yet in the polycentric setting of transnational governance, higher levels of ordering cannot be externally imposed; they must be internally generated. "Regime entrepreneurs" must take the lead in building and maintaining inter-institutional linkages.

Regime entrepreneurs require many skills of the "norm entrepreneur"[121] and "policy entrepreneur."[122] But regime entrepreneurs must also build and manage institutions and institutional relationships: helping to create new organizations, encouraging coordination and collaboration, providing support, solving problems and resolving conflicts. Entrepreneurs can operate successfully across levels: for example, an influential IGO might support private offset schemes and encourage them to coordinate standards. In polycentric ordering, however, entrepreneurship is more often horizontal: committed, capable and influential organizations engage with institutions of the same type.[123]

Some potential regime entrepreneurs can be easily identified:

- A leading organization of cities, such as the C40 Cities Climate Leadership Group, or the mayor of a major city with an international profile, could take the lead in building relationships among the several associations of sub-national governments that address climate issues, seeking to harmonize and strengthen their commitments and standards and to enhance learning, advocacy and other

[121] Cass R. Sunstein, Social Norms and Social Roles, 96 *Columbia Law Review* 903-968 (1996); Martha Finnemore & Kathryn Sikkink, International Norm Dynamics and Political Change, 52 *International Organization* 887-917 (1998)

[122] Nancy C. Roberts & Paula J. King, Policy Entrepreneurs: Their Activity Structure and Function in the Policy Process, 1 *Journal of Public Administration Research and Theory* 147-175 (1991)

[123] Galaz et al., supra note

joint activities. The entrepreneur would also recruit additional participants, increasing the network's impact.

- A leading private standards scheme, such as FSC in forest management and VCS or the Gold Standard in carbon offsets, could take the lead in aligning overlapping standards within an issue area and strengthening them over time. Alignment could in theory be achieved through a new umbrella organization or through merger.[124] More realistically, it would be achieved through coordination on standards and collaboration on certification, monitoring and labeling.
- Alternatively, a cross-sectoral association of leading standards schemes, akin to the ISEAL Alliance, could promote coordination, high standards and sound procedures among climate-oriented schemes operating in multiple issue areas, from forest management to emissions reporting.
- IGO officials – in the UNEP secretariat, for example – could take the lead in creating vertical linkages. UNEP has a mandate for coordination, and has long collaborated actively with business and other private organizations.[125] It could work to ensure that transnational climate standards are consistent with global public norms and policies, and that lessons from transnational programs flow into international deliberations. It could also encourage standards schemes to coordinate, support weaker institutions and promote new ones where gaps exist. UNEP could also promote an expanded role for transnational institutions in international governance.

To be sure, willing entrepreneurs with appropriate mandates and sufficient resources do not always appear when needed. Advocates for climate action must therefore be alert to the need for effective regime entrepreneurs, actively identify appropriate organizations and persuade them to step forward.

b. Orchestration: a strategy for regime entrepreneurs

Regime entrepreneurs need a feasible and effective strategy for building and managing institutional relationships. My own work (with Snidal and others) proposes the strategy of "orchestration" for managing assemblages of institutions without hierarchical authority.[126] In orchestration, an entrepreneur with significant authority, legitimacy and/or resources – like those identified above – acts as "orchestrator," seeking to influence the structure, activities and relationships of organizations within its own cohort and at other levels of governance.[127] Lacking hierarchical authority, the orchestrator

[124] For example, the Gold Standard acquired the standards organization CarbonFix in 2012.

[125] Abbott & Snidal, International Regulation Without International Government, supra note

[126] Id.; Abbott, Engaging, supra note ; Abbott, Transnational Regime Complex, supra note ; Abbott & Snidal, Strengthening International Regulation, supra note

[127] Orchestration theory hypothesizes that successful orchestrators are "focal," with an accepted leadership position in an issue area. Abbott et al., supra note

utilizes incentives and soft tools of influence rather than mandatory controls. Orchestration is the most feasible strategy in the polycentric setting of transnational climate governance.[128]

An orchestrator can influence institutions throughout their life cycles. First, using the convening authority its authority and legitimacy provide, it catalyzes the establishment of new organizations; where appropriate institutions exist, it "enrolls" them in cooperative relationships.[129] Second, it provides material and ideational support to institutions, strengthening their capacity. Third, through incentives and other soft forms of influence, it steers organizations to collaborate, further global norms and adopt sound governance practices. These three facets of orchestration address some of the major challenges facing the TRCCC.

Because orchestration relies on soft modes of influence, it fits well with relatively loose forms of ordering. Orchestrators do not directly establish new organizations, but catalyze their formation; they do not control other organizations, but enroll them voluntarily. The strategy requires that orchestrator and enlisted organizations share common goals, but it can help overcome disagreements over priorities and tactics.

c. Tools of influence for regime entrepreneurs

Regime entrepreneurs or orchestrators must perform two related functions. First, they must create or enroll constituent organizations, develop linkages among them, support them and steer their actions. Second, entrepreneurs must induce business firms and other non-state targets to adhere to and participate in voluntary transnational standards and programs. Although transnational regime entrepreneurs, and even IGOs, lack authority for mandatory controls, they can deploy a variety of incentives and tools of influence. Stewart, Oppenheimer & Rudyk emphasize arrangements that provide non-climate incentives (e.g., reducing energy costs) while generating incidental climate benefits.[130] While such arrangements are important, orchestration encompasses a wider range of incentives and tools, some related directly to climate performance.

i. Advancing institutional missions

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[128] In orchestration theory, Orchestrators engage Intermediaries to influence the behavior of Target actors. Abbott et al., supra note . Here I deemphasize targets and focus on the role of orchestrators in supporting and coordinating other organizations, many of which will operate as Intermediaries.

[129] On "enrolling," *see* Bruno Latour, The Powers of Association, in John Law, ed., *Power, Action and Belief: A New Sociology of Knowledge?* (Routledge & Kegan Paul 1986); John Braithwaite & Peter Drahos, *Global Business Regulation* (Cambridge University Press 2000); Julia Black, Enrolling Actors in Regulatory Systems: Examples from UK Financial Services Regulation, 2003 *Public Law* 63-91

[130] **

Many constituent organizations of the TRCCC have mandates or missions that call for action on climate change and related issues. The list includes environmental NGOs, environmental PPPs and some sub-national governments, as well as environmental IGOs. It even includes many business organizations structured around climate or social and environmental responsibility (e.g., VCS, WBCSD). To be sure, organizational interests may still produce pathological behavior,[131] and private sector organizations will still pursue win-win solutions and market-oriented approaches.[132] Yet the leaders and staff of these institutions retain significant commitments to their environmental missions.[133]

For committed actors, opportunities to more effectively advance their missions provide significant incentives for participation and cooperation. As described above, both horizontal coordination and collaboration and vertical linkages increase the effectiveness of transnational institutions in many ways. Regime entrepreneurs must maximize these benefits and communicate them to potential participants as they work to strengthen the regime complex.

ii. Persuasion

Regime entrepreneurs can use persuasion both to promote cooperation among institutions uncertain of its benefits and to increase the uptake of voluntary standards and programs. In both cases, persuasion will frequently be interest-based: entrepreneurs provide information, demonstration effects and learning opportunities that reveal the benefits of institutional coordination and collaboration. Peer organizations with relevant experiences can be particularly persuasive; institutional arrangements for peer interaction and review are thus valuable tools. Information, demonstration effects and learning opportunities likewise reveal to targets the possibilities for participation in voluntary programs to produce profits, reputational gains and other benefits. Technical experts can be persuasive on relevant scientific issues.[134]

Regime entrepreneurs may also engage in normative persuasion, asserting the appropriateness or inappropriateness of particular actions and conveying the normative expectations of the community. Normative persuasion generally seeks first to modify the discourses available to (resistant) target actors; ultimately it seeks to modify their preferences and perceptions of identity. Normative persuasion is helpful in promoting

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[131] Michael Barnett & Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Cornell University Press 2004)

[132] Robert Falkner, Private Environmental Governance and International Relations: Exploring the Links, 3 *Global Environmental Politics* 72-87 (2003); David Levy & Peter Newell, Business Strategy and International Environmental Governance: Toward a Neo-Gramscian Synthesis, 2 *Global Environmental Politics* 84-100 (2002)

[133] Biermann & Siebenhüner, supra note

[134] Peter Haas, Introduction: Epistemic Communities and International Policy Coordination, 46 *International Organization* 1-35 (1992)

inter-institutional cooperation, but it is essential in persuading target actors to accept voluntary standards. Because normative assertions are rarely free of resistance and conflict, persuasion may also involve "harder" tactics, such as exercising material leverage, stimulating external scrutiny and mobilizing shame.[135]

iii. Support for institutions

Support is a central technique of orchestration. It creates significant incentives for cooperation even as it strengthens constituent organizations. Regime entrepreneurs may provide material support, such as financial contributions or administrative assistance. They may also provide ideational support: regime entrepreneurs can single out and endorse organizations that meet substantive or governance criteria. Endorsement by a respected orchestrator provides a reputational incentive, initiates a "race to the top" among potential endorsees, and strengthens endorsed organizations.

Entrepreneurs can direct support horizontally to peer organizations, and vertically to organizations at different levels of governance. Private foundations and other funding organizations, as well as IGOs, can provide significant vertical support. In addition to building capacity, support is an instrument of steering, providing incentives for institutional cooperation, good internal governance and consistency with publicly accepted norms. Orchestrators can either condition support on desired activities, or target support directly to those activities.

iv. Engaging actors at risk

Many actors face risks from climate change. The US Securities and Exchange Commission recently identified a range of risks to business firms in calling for climate-related company disclosures.[136] These include risks from potential regulation and risks to customers from resulting price increases; risks from changes in consumer demand and other market developments; and physical risks to facilities and personnel, including those in supply chains. Alone, these risks provide some incentive for action on climate change, including adherence to transnational standards. Regime entrepreneurs can strengthen those incentives by highlighting risks and providing opportunities to address them.

Another way to strengthen incentives is to engage influential third parties that face significant climate risks, especially insurers and institutional investors. Such organizations possess strong monitoring capacity as well as leverage over firms and other targets. Several transnational institutions now engage investors and insurers to influence the behavior of firms with which they (might) do business; these include Climate Wise, the Institutional Investors Group on Climate Change and the Investor Network on

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[135] Keck & Sikkink, supra note ; Thomas Risse, Stephen C. Ropp & Kathryn Sikkink, *The Power of Human Rights: International Norms and Domestic Change* (Cambridge University Press 1999)

[136] Securities and Exchange Commission, Commission Guidance Regarding Disclosure Related to Climate Change, *Federal Register,* Vol. 75, No. 25, at 6290 (2010).

Climate Risk (coordinated by the NGO CERES), as well as PRI and the Principles for Sustainable Insurance, both sponsored by UNEP. Regime entrepreneurs could increase the impact of these groups by supporting them and promoting coordination among them.

v. Material and reputational incentives

Stewart, Oppenheimer & Rudyk demonstrate that "clubs" of public and private actors can realize material benefits through actions that produce incidental climate benefits. Orchestrators can create similar incentives by directly tying varied material and reputational benefits to climate action.

Financial programs show particular promise. Institutions that finance firms and other non-state actors have unique levels of influence that can be exercised to promote climate-friendly actions. For example, the International Finance Corporation (IFC) finances private firms in developing countries. Firms that receive IFC financing must accept its Performance Standards, which require environmental management systems, environmental and social impact assessments, and public reporting.[137] The World Bank's Climate Investment Funds, the Global Environmental Facility (GEF) and other institutions also finance projects that directly or indirectly benefit non-state actors. These institutions already apply environmental and social safeguards, but these can be strengthened, more effectively implemented and better coordinated. Private foundations, major donors and commercial financing organizations can be encouraged to apply similar safeguards, as the Equator Principles, PRI and other transnational schemes do.

Certification and labeling programs also tie material and reputational benefits to climate performance. A certification scheme like FSC allows firms to communicate to consumers and buyers along the supply chain that they, and frequently their suppliers, comply with stated standards. Carbon offset schemes such as VCS, CCBA and the Gold Standard do the same for voluntary carbon markets. To the extent potential consumers base purchasing decisions (including price) on such information – or can be persuaded to do so – certification programs create positive market and reputational incentives.[138] Coordination among certification and labeling organizations could ameliorate many of the limitations they face.

Orchestrators can also deploy other reputational incentives. Regime entrepreneurs could develop coordinated mechanisms for reputational sanctioning: singling out and endorsing institutions, firms and other actors that perform well and publicizing those that perform poorly. While Stewart, Oppenheimer & Rudyk focus on firms that are "levelers

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137 http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/

138 Advocates can create negative incentives through mechanisms such as consumer boycotts.

of the playing field,"[139] this complementary strategy would engage firms that seek to be leaders, for reputational, material or normative reasons. IGOs have been reluctant to traffic in the reputations of non-state actors,[140] but transnational institutions – especially those based in civil society – are more amenable to and more skilled at reputational sanctioning.

5. Conclusion

With the Durban Platform in place, inter-state negotiations on climate change are entering a hopeful period. Overall, however, international climate policy-making has proven inadequate to the problem, creating a pressing need for governance innovations. This article proposes an approach that is both feasible and promising.

That approach starts from the premise that a loose regime complex of transnational climate institutions already exists; those organizations are made up of diverse private actors and sub-national governments, sometimes in partnership with international organizations and national governments. To enhance the transnational regime complex, regime entrepreneurs should strengthen weaker organizations, promote the formation of new organizations to fill governance gaps, and increase the level of inter-institutional cooperation.

With stronger linkages, networks of transnational institutions could penetrate states at multiple levels, directly engaging sub-state, societal and even governmental actors, and targeting them with voluntary norms backed by social and economic incentives, demonstration projects and other governance activities. Linked transnational institutions could, moreover, mobilize coordinated pressure on governments. An enhanced transnational regime complex would function best as a complement to a robust international regime, extending its norms into the private sector and sponsoring parallel programs. The TRCCC could, however, function independently, providing at least some forward movement on climate issues.

To be sure, a stronger transnational regime complex – like any governance approach – is no panacea. Transnational institutions face serious challenges, especially in regulatory governance, as they depend on voluntary adherence and participation, driven by uncertain consumer and public demand. Efforts by regime entrepreneurs to strengthen linkages, provide support, mobilize public demand and steer transnational organizations would ameliorate some of these limitations, but not all. In addition, inter-institutional

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[139] Mattli & Woods, supra note , at 35-36

[140] A few have become more active in this area. The UN Global Compact, which long avoided any suggestion of "enforcement," now publicly identifies firms that fail to submit timely communications and those expelled for failure to disclose. In addition, its "differentiation program" encourages NGOs to assess participants' performance, so that it can single out superior performers. http://www.unglobalcompact.org/COP/differentiation_programme.html

cooperation faces significant barriers, resulting from differing actor preferences and organizational interests.

The proper point of comparison, however, is not the perfect, but the actual. So long as inter-state agreements remain weak, an enhanced transnational regime complex can provide a valuable complement. So long as inter-state processes remain inadequate, the transnational regime complex can serve as a partial substitute. It can, moreover, generate political pressures and introduce governance innovations, providing leadership for transnational processes and strengthening global climate governance as a whole.